

CALIFORNIA ENERGY COMMISSION

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April 15, 2001

Members of the Senate Energy, Utilities and Communications Committee
Members of the Senate Budget and Fiscal Review Committee
Members of the Senate Appropriations Committee
Members of the Assembly Utilities and Commerce Committee
Members of the Assembly Budget Committee
Members of the Assembly Appropriations Committee
California State Capitol Building
Sacramento, California 95814

**RE: California Energy Commission's Quarterly Report Concerning the
Renewable Energy Program**

Honorable Members:

The Public Utilities Code (PUC), Article 5, Section 445(g) requires the California Energy Commission to submit quarterly reports on the Renewable Energy Program. Enclosed is the thirteenth quarterly report for the Program, covering the period January 1 through March 31, 2001. As reflected in this report, the Energy Commission continues to make significant progress in implementing the Program.

Should you have any questions or comments concerning this report, please contact Tim Schmelzer, Assistant Director of the Office of Governmental Affairs, at 654-4942 or by e-mail at <tschmelz@energy.state.ca.us>.

Respectfully submitted,

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Commissioner and Presiding Member
Electricity and Natural Gas Committee

ARTHUR H. ROSENFELD
Commissioner and Associate Member
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Enclosure

cc: California Legislative Analyst's Office

California Energy Commission's Quarterly Report Regarding the Renewable Energy Program

(January 1 – March 31, 2001)

The California Energy Commission is pleased to submit its Quarterly Report on the Renewable Energy Program, covering the period January 1 through March 31, 2001.¹ The report describes the Energy Commission's implementation activities, including information regarding awards submitted to the State Controller² for payment, the cumulative commitment of claims by account, the relative demand for funds by account, a forecast of future awards, and related matters.

Background

Assembly Bill 1890 ([AB 1890] Chapter 854, Statutes 96) required California's three major investor-owned utilities to collect **\$540 million** from their ratepayers over a four-year period (1998-2002) to help support renewable electricity-generation technologies and develop a renewable market. As mandated by AB 1890, the Energy Commission submitted its ***Policy Report on AB 1890 Renewables Funding (Policy Report)*** to the Legislature in March 1997, with recommendations for allocating and distributing these funds. Senate Bill 90 ([SB 90] Chapter 905, Statutes 97) subsequently established a Renewable Resource Trust Fund, placed the \$540 million into the fund, and directed the Energy Commission how to distribute the fund through four distinct accounts consistent with the ***Policy Report***. These accounts and the total funds allocated to each are as follows:

- Existing Renewable Resources Account (**\$243 million**)
- New Renewable Resources Account (**\$162 million**)
- Emerging Renewable Resources Account (**\$54 million**)
- Customer-Side Renewable Resources Purchases Account:
 - Customer Credit Subaccount (**\$75.6 million**)
 - Consumer Education Subaccount (**\$5.4 million**)

In January 1998, consistent with SB 90, the Energy Commission adopted overall funding guidelines, eligibility requirements, yearly allocations, and account-specific guidelines to assist participants in applying for funding from the various accounts within the Program.

Renewable Energy Program Implementation

The mechanisms for distributing funds vary by account, as do the implementation activities for each account. Table I highlights the Energy Commission's implementation activities for the first quarter of 2001 and describes the expected funding and implementation activities for the second quarter of 2001.

¹ Public Utilities Code (PUC), Article 5, Section 445(g) requires the Energy Commission to report to the Legislature quarterly on fiscal and programmatic aspects of the program.

² As a procedural matter, the Energy Commission submits awards directly to the State Controller for payment, rather than through the Treasurer.

Table I
Renewable Energy Program:
First Quarter 2001 Program Implementation

| Account, Program-Implementation, and Funding Activities: January – March 2001 | Expected Funding and Implementation Activities: April – June 2001 |
|--|---|
| Existing Account | |
| <ul style="list-style-type: none"> • A total of 370 facilities are registered as renewable suppliers, and 264 facilities are eligible for funding. • Tier 1 (biomass, solar/thermal, and waste tire) received no payments for November 2000, December 2000, and January 2001. • Tier 2 (wind) received no payments for November 2000, December 2000, and January 2001. • Tier 3 (geothermal, digester and landfill gas, small hydro, and municipal solid waste) received no payments for November 2000, December 2000, and January 2001. • No payments were made this quarter. • Rollover of \$69.4 million for Tiers 1, 2, and 3. | <ul style="list-style-type: none"> • No payments will be made in the second quarter of 2001. • An additional reallocation of \$50 million in rollover funds is expected in order to fund a third auction under the New Account. |
| New Account | |
| <ul style="list-style-type: none"> • Thirteen projects are on-line and producing energy. • To date, payments totaling \$6.325 million have been made to 10 on-line facilities for 527 million kWh of new renewable energy generation. • Payments totaling \$1.86 million were made this quarter. • The staff continued to implement the results of the second auction held in December 2000. | <ul style="list-style-type: none"> • A third auction is proposed to encourage further development of new projects. • Construction of projects will continue, as will payments to on-line facilities. • Nineteen additional projects are scheduled to come on-line by July 1, 2001. |
| Emerging Account | |
| <ul style="list-style-type: none"> • Funds encumbered for Buydown Program reservation requests currently total \$7.15 million. • To date, payments for installed systems total \$7.56 million. • Received 711 new reservation requests this quarter. | <ul style="list-style-type: none"> • An on-line reservation process is expected to be available by the end of April. • Monitoring program jointly funded by the Energy Commission and Department of Energy continues. • The analysis of supply-side constraints is scheduled for completion by the end of April. • Additional new reservation requests are expected at an increasing rate, due in part to impending electric rate hikes for SCE and PG&E customers. |
| Customer Side Account | |
| Customer Credit Subaccount | |
| <ul style="list-style-type: none"> • Twenty-nine active marketers are registered as renewable providers, offering a total of 46 products containing renewable energy. • One wholesaler registered a new product this quarter, for a total of four registered wholesalers. • To date, \$52 million has been paid to providers. | <ul style="list-style-type: none"> • Expenditures will decline as providers return their customers to utility service. • Payments will continue at a reduced level, as some providers continue to serve their customers. • The credit level of 1.0 cent/kWh remains effective through June 30, 2001. |
| Consumer Education Subaccount | |
| <ul style="list-style-type: none"> • Managed seven grants for emerging renewable energy market consumer education activities. • Payments totaling \$71,872 were made to the seven grant awardees. • Released a \$620,000 grant solicitation for renewable energy consumer outreach/education. • Released a \$2.5 million contract solicitation for renewable energy public awareness campaign. | <ul style="list-style-type: none"> • Develop grant agreements with successful applicants of solicitation. • Evaluate/score proposals responding to public awareness campaign solicitation; initiate contract with winning bidder. • Coordinate with Earth Day fairs and festivals planned throughout the State. • Payments will continue to ongoing grant projects. |

Renewable Resources Trust Fund Expenditures

Through March 31, 2001, the Renewable Resource Trust Fund has *received* a total of \$362.6 million for all of the accounts. As of the first quarter of 2001, the Energy Commission has awarded a total of \$199.9 million, reflecting payments (disbursements) from all of the accounts. Eligible applicants have *reserved* \$91.34 million, reflecting fund reservations (encumbrances) from the New Account, the Emerging Account, and the Consumer Education Subaccount. Table II shows a financial summary of the Renewable Resources Trust Fund as of the first quarter of 2001, reflecting cumulative funding and expenditures since the beginning of the Program, and those that occurred during the first quarter of 2001.

Table II
Renewable Resource Trust Fund
Current Funding and Expenditures for the Quarter Ending March 31, 2001
(\$ millions)

| | Existing Account | New Account | Emerging Account | Customer-Side Account Customer Credit | Consumer Education | Program Total |
|----------------------------------|-----------------------------|------------------------------|----------------------------|--|--------------------|----------------------------|
| Available Funds | 181.076 | 99.840 | 36.262 | 41.820 | 3.626 | 362.625³ |
| Total Disbursements | (132.733) | (6.325) | (7.555) | (52.035) | (1.206) | (199.854) |
| First Quarter 2001 Disbursements | 0.000 | (1.858) | (1.876) | (7.895) | (0.071) | (11.700) |
| Intrafund Transfers | 0.000 | (10.215)⁴ | 0.000 | 10.215 | 0.000 | 0.000 |
| Intrafund Reallocations | (40.000)⁵ | 40.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Current Balance | 8.343 | 123.300 | 28.708 | 0.000 | 2.420 | 162.771 |
| Encumbrances | 0.000 | (123.300)⁶ | (7.153)⁷ | 0.000 | (0.883) | (131.336) |
| Unexpended Funds | 8.343 | 0.000 | 21.555 | 0.000 | 1.537 | 31.435 |

The three investor-owned utilities continue making deposits into the Fund with payments current to March 31, 2001. The Program design has a built-in, two-month processing period for payments to eligible energy in several accounts.

As Table II reflects, in the first quarter of 2001 the State Controller made payments from the Customer Credit Subaccount to providers of renewable energy, and from the Emerging Account to recipients of the Buydown Program. Payments were also made

³ Available funds include \$10,468 in voluntary contributions.

⁴ This quarter, an additional \$2.435 million was transferred from the New Account to the Customer Credit Subaccount. The total transfer amount to date is \$10.215 million. The funds will be repaid later in the Program.

⁵ The Energy Commission authorized this reallocation of up to \$40 million in October 2000.

⁶ The Energy Commission conditionally allocated \$162 million at its June 1998 auction, and \$40 million at its December 2000 auction. Funds are encumbered for projects as they become available.

⁷ Reservation requests granted (but not yet paid) since the March 20, 1998 start-up of the Buydown Program.

from the New Account to nine of the 13 projects that are now on-line and generating renewable energy, and from the Consumer Education Subaccount to grant award recipients for emerging renewables education activities. The Energy Commission encumbered funds from the Emerging Account for systems participating in the Buydown Program, the Consumer Education Subaccount for grant project activities and the Renewable Energy Public Awareness campaign contract, as well as from the New Account for 69 projects with funding award agreements from the first and second auctions. Funding for these projects will eventually total up to \$202 million; funds from the New Account will continue to be reserved as funding becomes available.

Existing Account

As expected, because of high short-run avoided cost (SRAC) prices during the first quarter of 2001, no incentive payments were made to any facilities. SRAC prices are expected to stay above 5.0 cents per kilowatt-hour (cents/kWh) throughout the second quarter of 2001 and will likely remain high as long as natural gas prices continue to be above normal. As a result of these high SRAC prices, no payments will be made to any facilities in Tiers 1, 2, or 3 during the second quarter of 2001. Unless a significant change in the current SRAC price trend occurs, facilities are not likely to receive any additional payments before the end of the Existing Account program in December 2001.

The rollover amount increased by an additional \$14 million this quarter, currently stands at over \$69 million, and based on conservative projections, will increase to \$81 million by the end of the second quarter and \$95 million by the end of the year. The rollover is the amount of money that is available in the Existing Account but has not yet been paid out to facilities. Any funds that are not paid in one month are added to the following month's allocation and made available for that month's payment cycle. As long as no payments are made to facilities, the rollover amount will continue to increase.

The Energy Commission has authorized a reallocation of \$40 million to the New Account from the \$69 million in rollover funds that is currently available in the Existing Account. Up to \$40 million will be used to fund the results of the New Account's second auction, which was held in December 2000. In addition, the Energy Commission may transfer an additional \$50 million in Existing Account rollover funds to the New Account in order to fund the results of a third auction to be held later this year.

The Energy Commission will determine at a later date the actual amount of funding needed to fully fund winning bids from the second and third New Account auctions. This figure may not be known for several months after the third auction is held because it is possible that auction winners could drop out, qualify for additional incentives, or have their funding awards under the auction either reduced or canceled.

New Account

Ten projects that were awarded funding through the New Account's first auction are now on-line and contributing approximately 100 MW of new renewable energy capacity to California's energy supply.

To date, these projects — seven landfill gas facilities totaling over 23 MW of capacity, two geothermal projects totaling 60 MW of capacity, and one 16.5 MW wind project —

have received a total of \$6,324,830 in payments for approximately 527 million kWh of new renewable generation. Three additional projects are technically on-line but have not yet submitted payment invoices to the Energy Commission. These three projects include a 1.6 MW landfill gas facility, a 2.8 MW landfill gas facility, and a 2 MW wind facility. The remaining 39 projects from the first auction are in various stages of development.

The first award-winning project from the second auction, a 1.2 MW landfill gas facility, came on-line in mid-February. The remaining 16 projects from the second auction, totaling 470 MW in capacity, are scheduled to be constructed and on-line by the end of 2001 (some expect to be on-line by the summer of 2001). These projects will deliver an estimated 7 billion kWhs of renewable energy over five years, enough to power about 230,000 homes.

The New Account's first auction, which awarded \$162 million to new renewable energy projects, was held in June 1998 and resulted in approximately 500 MW of in-state renewable energy capacity that is scheduled to be on-line by December 31, 2001. The second auction, which was held in December 2000, was specifically designed to fund projects that could follow an expedited schedule to help ease California's current energy shortage, which is likely to worsen by summer 2001.

The Energy Commission intends to hold a third auction in the second quarter of 2001 to encourage the further development of new projects. As with the second auction, the Energy Commission expects to transfer rollover funds from the Existing Account to the New Account in order to fund the third auction, which will likely allocate up to \$50 million to winning projects.

Emerging Account

The Buydown Program has received 1,658 reservation requests since it began on March 20, 1998, including 711 new requests during the first quarter of 2001. This is about an 11-fold increase over the 61 requests received one year ago in the first quarter of 2000. The escalation in the number of reservation requests received by the Buydown Program is primarily a result of California's current energy crisis, as residents and businesses are becoming increasingly interested in securing a reliable and cost-predictable energy source.

Currently, \$7.15 million is encumbered for projects with reservation requests, and the State Controller has paid approximately \$7.56 million to completed projects. The total amount of encumbered funds does not include about 126 reservation requests received during the first quarter of 2001, which are still in various stages of the review process and have not yet received approval for funding.

Reservation requests are expected to continue to increase exponentially in future months as a result of the upcoming rate increase in the PG&E service territory, and the anticipated rate increases for customers who receive energy from SCE and various local municipalities.

In anticipation of higher reservation activity in the coming quarter, the Emerging Account staff decided to develop an on-line reservation process. A contract with the Marketing Store/4th Revolution was executed in March for this activity, with a finished product ready by the end of April. In addition, because of the high volume of phone calls to the Energy Commission inquiring about solar and wind rebates, a "Call Center Hotline" for Buydown Program-related activities was created this quarter.

Other Emerging Account activities during the first quarter of 2001 include those carried out by technical support contractor Regional Economic Research, Inc. (RER).

- A monitoring program of photovoltaic (PV) and small wind generating systems, jointly funded by the Energy Commission and the Department of Energy (DOE), continues. Phase 2 of the monitoring program is presently ongoing and involves additional data-collecting at customer sites.
- Work authorizations are ongoing with RER and ENDECON involving additional troubleshooting of under-performing systems, developing a technical manual for PV systems, additional training sessions for building officials, and quality control assistance for retailers/installers.

A draft final report was received from Renewable Energy Development Institute (REDI) dealing with research and evaluation of various loan program options.

Customer Credit Subaccount

In the first quarter of 2001, the direct access market for renewable energy declined sharply in response to California's energy crisis. Although this decline began at the close of the fourth quarter of 2000, it is not yet fully reflected in the status of the Customer Credit Subaccount largely because of the lag between market activity and when the providers report their monthly sales to the Energy Commission.

An indicator of market activity for the Customer Credit Subaccount is the number of providers that are registered with the program. The registration figures for providers held steady from last quarter at 29 providers and 46 products. One new wholesaler registered, however, bringing the total to four registered wholesalers.

The number of registered providers does not fully reflect market activity, since providers can register with the Energy Commission before they serve electricity to customers, and since suspending or otherwise changing a provider's registration status is essentially voluntary. A more accurate reflection of market activity is depicted through the number of providers registered and the number of providers that are actively serving customers. In December 2000, there were 19 providers serving customers. By the close of this quarter, however, 10 of those providers either have already exited the market or have stated that they are planning to exit the market.

It is important to note that the nine providers that are expected to remain in the market have shed some, or nearly all, of their total energy load. Moreover, only three providers are accepting new customers, and only on a limited basis. These providers are only accepting residential or small commercial customers and, in one case, only in the San Diego area.

The total disbursements from the Customer Credit Subaccount this quarter continue to exceed allocations to the subaccount, but this trend is not expected to continue. To date, the State Controller has paid approximately \$52.0 million to registered renewable providers. Payments totaling \$14.4 million have been made to large customers that are not residential or small commercial. Over the life of the Program, there is a \$15 million cap on the amount of funds that may be paid to non-residential and non-small commercial customers; the cap will likely be reached early in the second quarter of 2001.

The credit level is currently set at 1.0 cent per kWh through June 2001. Next quarter, the Energy Commission will need to re-set the credit level for the six-month period from July through December 2001.

Consumer Education Subaccount

During the first quarter of 2001, the staff managed seven grant projects for consumer education and outreach activities for the emerging renewable energy market. Payments totaling \$71,872 were made for activities for which invoices were received during this period.

Highlights of the grant projects completed during this period include the following:

- SunPower posters were distributed to 1,100 California post office lobbies.
- The Community Environmental Council/Gildea Resource Center Photovoltaic Display was assembled and installed at the Gildea Resource Center.
- Five food cooperatives were presented with an economic analysis of PV systems – they all agreed to install systems in their stores.
- Articles on emerging renewable technologies were featured in several publications, including the *Chico News and Review*, the *California Journal*, *Solar Today*, the *Sacramento Bee*, and the Local Government Commission's *Currents Newsletter*.

An update of the *Renewable Energy Consumer Education Marketing Plan* is on hold pending the outcome of several renewable energy bills that the California Legislature is currently considering. The *Marketing Plan* will be updated to incorporate experience that has been gained since its implementation, as well as to adjust for subsequent changes in the renewable energy market. When completed, the revised *Marketing Plan* will optimize flexibility and responsiveness to opportunities and changes in the renewable energy market.

On January 23, 2001, the Energy Commission released a Program Opportunity Notice for consumer education outreach activities for the renewable energy market. Funding totaling \$620,000 will be made available for projects that provide information to consumers about renewable energy and emerging renewable generation technologies, their environmental benefits and the opportunities for installing emerging renewable systems in California. Grant applications are due April 2, 2001.

On February 23, 2001, the Energy Commission released a \$2.5 million Request for Proposals for a Renewable Energy Public Awareness Campaign. The goals of the

campaign are to increase consumer awareness and purchases of renewable energy and emerging renewable technologies. To meet these goals, the project will identify California consumers most likely to choose renewable energy and then develop and implement the most effective campaign messages along with the strategies to meet them. Proposals for this solicitation are due April 17, 2001.

In summary, the Energy Commission continues to make excellent progress in implementing the Renewable Energy Program. We expect Program disbursements of the Renewable Resource Trust Fund to increase in the second quarter of 2001.